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1916/17

RUTGERS SCIENTIFIC SCHOOL

THE STATE COLLEGE

for the benefit of

Agriculture and the Mechanic Arts

and

THE STATE UNIVERSITY

of

NEW JERSEY

NEW BRUNSWICK, N. J.

Fifty-Third Annual Report, October, 31, 1917.

RAIDERS, N. J.
New Jersey Broadacastory Paper
1918

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Report of the State Board of Visitors

To His Excellency, Walter E. Edge, Governor of the State of New Jersey:

SIR:—The Board of Visitors of the State Agricultural College herewith present their fifty-third annual report upon the present condition and courses of instruction at that institution, as required by the act creating the Board, entitled "An Act appropriating script for the public lands granted to the State of New Jersey by the act of Congress approved July second, one thousand eight hundred and sixty-two," and approved April 4th, 1864.

The members of the Board made an annual examination of the students pursuing the regular and special courses of instruction on October 26th, 1917, and adopted a resolution "That the Board of Visitors of the State Agricultural College express their satisfaction with the conduct of the college. They find the property and equipment in good condition and the corps of instructors well qualified and effective in their work. They record their judgment that the Trustees of Rutgers College in New Jersey are carrying out with faithfulness and success their contract with the State."

During the year the membership of the Faculty has been 64, and all but five of this number have given instruction in the Scientific School.

The enrollment of students for the year was 1,508; graduate students, 27; seniors, 76; juniors, 90; sophomores, 139; freshmen, 205; special students, not candidates for a degree, 142; summer session, 626; and preparatory school pupils, 203. The degree of Bachelor of Science was conferred upon 52 graduates in June, 1917. Of these graduates, 16 had pursued the Course in Agriculture, 5 the course in Biology, 1 the Course in Ceramics, 9 the Course in Chemistry, 10 the Course in Civil Engineering, 3 the Course in Electrical Engineering, 4 the Course in Mechanical Engineering, and 4 the Course in General Science. The degree of Bachelor of Arts was conferred upon 10 candidates, and the degree of Bachelor of Letters upon 15 candidates at the same time.

The following is a list of the members of the graduating class of 1917, with the subject of each graduate's thesis:

GRADUATION THESIS—CLASS OF 1917.

DAVID GREENLIE ACKERMAN, Passaic, N. J.—The Origin, Development, and Present Status of the Interstate Commerce Commission.

LAUREN SINCLAIR ARCHIBALD, Bovina, N. Y.—A Study in Feeding for Advanced Registry Records.

CHARLES EDWARD BLOODGOOD, Catkill, N. Y.—The Stoic Influences in St. Paul's Epistles.

WINFRED COLBY BLOOM, Catskill, N. Y.—Origin of Labor Unionism in the United States.

HERBERT WALDEMAR BOES, Newark, N. J.—Fermented Milk Drinks.

PAUL MITCHELL BOWEN, Shiloh, N. J.—Review of the Milltown Sewer Works.

ROBERT OSWALD BOWLBY, Somerville, N. J.—Types of Steam Boilers.

WILLIAM HENRY BOWLES, Elizabeth, N. J.—The Design of a Boulevard Connecting Ryder's Lane with Burnet Street at Weston's Mills.

LAWRENCE FULTON BRAINE, JR., New York, N. Y.—A Comparison of Certain Grammatical Constructions in French, Spanish, and Italian.

CHRISTIAN WILLIAM BRAUN, Paterson, N. J.—Lincolnton Democracy.

MORRIS BREITKOPF, New Brunswick, N. J.—The Study of Certain Dye-stuffs.

FRANK HAVILAND BROOME, Roselle Park, N. J.—Boiler and Turbine Tests in a Modern Power Station.

JOSEPH LESLIE CHAMBERS, Yonkers, N. Y.—Determination of the Boundary of the Reservoir at Weston's Mills, if the Water Should Be Raised Three Feet Higher Than That of the Present Dam.

LOUIS APGAR COOLEY, Trenton, N. J.—A Study of the Effect of Environment on the Tomato Flower.

PERCY EUGENE CUNNIUS, New Brunswick, N. J.—The Religious Teachings of Euripides.

MAX DRILL, Newark, N. J.—Through Pratt Truss Skew Bridge.

WILLIS PIERRE DURIZ, Baldwin, N. Y.—A Study of Root Nematodes.

HERMAN EISENBERG, Norma, N. J.—Factors Determining the Resistance of Plants to Cyanide Fumigation.

RUDOLPH ELMER, Egg Harbor City, N. J.—A Study of Certain Dyestuffs.

HAROLD WILLIS FAINT, Roselle Park, N. J.—The Electro-Deposition of Aluminum and Aluminum Alloys.

HAROLD IRVING FAWCETT, Ridgewood, N. J.—The Quadratic Surd as a Continued Fraction.

MYRON JAMES FOLENSBEE, Schoharie, N. Y.—Determination by Precise Leveling Methods of the Difference in Elevation of the Bench Mark at Weston's Mills and the Governmental Bench Mark at Queens, Rutgers College, New Brunswick, N. J.

LAWRENCE HENRY FRENCH, Plainfield, N. J.—The Organization of the Courts of the United States Under the Judiciary Act of 1789.

EARL COURTNEY GASKILL, Barnegat, N. J.—Commercial Extraction of Potash from Feldspars.

ISIDOR BIP GLUCKSMAN, Newark, N. J.—The Beginnings of Scientific Socialism in the United States.

MANTON LEWIS GRAFF, Jersey City, N. J.—Rations for Wintering Dairy Heifers.

BENJAMIN BERNARDUS HAGEMAN, Millstone, N. J.—Feeding Experiments with Dairy Cattle: 1. Wet vs. Dry Brewers' Grains; 2. Eastern vs. Western Alfalfa Hay.

HERBERT DEFREEST HAMM, Troy, N. Y.—The Limitations on Colonial Legislation.

FREDERICK BENJAMIN HEITKAMP, Chatham, N. J.—A Study of the Organization of Minor Municipalities in New Jersey.

WILBUR COPLEY HERBERT, Newfoundland, N. J.—Military Policies and Systems.

ALFRED GUSTAV HEWEL, Jersey City, N. J.—Design of a Purification Plant for the Sewerage of New Brunswick, New Jersey.

ALFRED MERVIN HICKMAN, Asbury Park, N. J.—The Influence of Malory's *Mort d'Arthur* on Tennyson's *Idylls of the King*.

HARRY BRITTON HOLCOMBE, Lambertville, N. J.—Factors causing the Splitting of Carnation Calycies.

ALBERT WILLIAM HOLZMANN, Newark, N. J.—Heinrich von Kleist as a Romanticist.

ARTHUR FRED HOPE, Asbury Park, N. J.—The Study of Certain Dyestuffs.

HARRY LATIMER JANEWAY, New Brunswick, N. J.—The Nature of Esthetic Valuation.

JOHN WILLIAM JOHNSON, Stanton, N. J.—Chemical Control of Tropisms.

JEROME KAHN, New Brunswick, N. J.—Water Purification.

HARRY RAMPEY KLEIN, Irvington, N. J.—Boiler and Turbine Tests in a Modern Power Station.

HERBERT CLARENCE KOEHLER, Hazleton, Pa.—A Study of Certain Dyestuffs.

WALTER FRED KROMMELBEIN, Elizabeth, N. J.—The Dairy Plant for Thirty-five Cows and Accessory Animals.

JOEL LEE LAREW, South Amboy, N. J.—The Operating Principles of Ammonia Absorption Refrigerating Machines.

ROY FRANCIS LAYTON, New York, N. Y.—A Study of Certain Dyestuffs.

MARVIN LEEDS, Atlantic City, N. J.—Daudet, the French Dickens.

MAX LEVY, Newark, N. J.—A Study of Certain Dyestuffs.

CLIFTON HENRY LUSTER, Elizabeth, N. J.—Determination of the Boundary of the Reservoir at Weston's Mills, if the Water Should Be Raised Three Feet Higher Than That of the Present Dam.

CHARLES FRANCIS McDONALD, JR., Englishtown, N. J.—Fundamental Economic Principles as Related to the Cigar Industry.

JOHN BROOMFIELD MADDOCK, Trenton, N. J.—The Possibilities of Domestic Materials in the Manufacture of Sanitary Wares.

ROBERT VAN EMBURG MARTIN, Hasbrouck Heights, N. J.—Tissue Growth Outside the Body.

FLOYD EDWARD MEHRHOF, Ridgefield Park, N. J.—A Discussion of Some Heat Engine Cycles.

ALAN BERTRAM MILLER, Merchantville, N. J.—Some Measurements on the Growth of Dairy Heifers.

CLIFFORD PIERSON OSBORNE, Mt. Freedom, N. J.—Computation of Trigonometric Functions That Are Aliquot Parts of Π .

GUSTAV PATZ, Newark, N. J.—The Historical Background of Emilia Galotti.

GEORGE JOHN AUGUSTUS PERPENTE, Middlebush, N. J.—The Adamson Act of September 19, 1916, Regulating the Hours of Labor on Railways.

ALFRED LESLIE PFEIL, Irvington, N. J.—Boiler and Turbine Tests in a Modern Power Station.

JOHN LAWRENCE PITT, Bridgeton, N. J.—English Metrical Versions of Euripides.

JOHN KINGSLEY POWELL, Metuchen, N. J.—Concrete Piles.

KARL HENRY RUH, JR., Millstone, N. J.—A Study of Certain Dyestuffs.

FRANCIS JOSEPH SCARR, Hasbrouck Heights, N. J.—Proposed Connecting Branch of Pennsylvania Railroad Between Stelton and Plainfield.

SYDNEY SEIDLER, Newark, N. J.—Approximations in Rectifying Arcs.

EDWIN ARTHUR SEIDMAN, Newark, N. J.—The Effect of Excitement in Promoting a Condition of Glycosuria.

HERBERT WALTER SEIDMAN, Newark, N. J.—Variations in the Heart Beat of *Daphnia*.

WALTER HAMILTON SEWARD, Vineland, N. J.—The Separation of the Powers of Government of the United States and of the States.

BENJAMIN SHANEFIELD, Vineland, N. J.—The Organization of the United States Courts.

LANSING PETER SHIELD, New Brunswick, N. J.—The Relation of Heredity to Mental Diseases.

HARRY SPITZER, Perth Amboy, N. J.—Vocational Selection.

JOHN BAYARD STEVENS, New Brighton, N. Y.—The Value and Economy of Molasses in a Ration for Brood Sows.

FREDERICK SUMMERILL, Penn's Grove, N. J.—Anatomy, Physiology, and Diseases of the Ear.

ROBERT GERALD TEST, Merchantville, N. J.—Suggestions for Planning Fruit Gardens.

LAWRENCE DORLAND THOMPSON, Rutherford, N. J.—Transfer of the Blood Forming Function from Organ to Organ in the Embryo.

JAMES WALLACE THOMSON, New Kingston, N. Y.—Blood Count in Various Pathological Conditions.

WILLIAM PHILLIPS THORP, JR., East Orange, N. J.—The Structure, Operation, and Efficiency of Incubators.

LOUIS TRIMNELL, JR., Newfield, N. J.—A Study of Safety Valves.

IRVING RUSSELL TROLL, Jersey City, N. J.—The Evolution of a Standard Unit Poultry Plant for One Thousand Birds.

HAROLD EHLE WETTYEN, Cedar Grove, N. J.—The Cost of Milk Production in New Jersey.

WILLIAM WHYMAN, Elizabeth, N. J.—The Effect of Individuality Upon Flock Averages.

WILLIAM STANLEY WOODWARD, Englishtown, N. J.—A Comparison of the Different Methods of Sewage Disposal.

APPOINTEES TO STATE SCHOLARSHIPS UNDER ACT
OF 1864.

<i>Counties.</i>	<i>No. Sch.</i>	<i>Appointee.</i>	<i>Class.</i>	<i>Residence.</i>
Atlantic	1	Leo J. L. Whitehead.....	1921	Monmouth
Bergen	1	John H. Wallace.....	1920	Bergen
Burlington	1	Earle V. Conover.....	1920	Monmouth
	2	Lisle E. Gaige.....	1921	Monmouth
	3	Garrett I. Johnson.....	1921	Monmouth
Camden	1	Stuart T. Danforth.....	1921	Middlesex
	2	Paul F. Fenton.....	1920	Middlesex
Cape May	1	Frederick F. Rollins.....	1921	Bergen
Cumberland ...	1	Lewis J. Sklar.....	1921	Cumberland
Essex	1	Gustave S. Bear.....	1920	Essex
	2	Andrew A. Burkhardt.....	1920	Essex
	3	George W. Davis, Jr.....	1921	Essex
	4	Alexander M. Goldfinger...	1921	Essex
	5	William E. Mutch.....	1920	Essex
	6	John M. Tegen.....	1921	Essex
Gloucester	1	Arthur R. Dayton.....	1920	Hunterdon
Hudson	1	Abraham Golden.....	1919	Hudson
	2	Frank D. Kull.....	1921	Hudson
	3	Kenneth M. Rendall.....	1919	Hudson
	4	Cyrus P. Francisco.....	1921	Essex
	5	Charles U. Hummel.....	1921	Essex
	6	Rodney S. Vose.....	1920	Essex
Hunterdon	1	John E. Tine.....	1920	Hunterdon
Mercer	1	Willard R. Devaul.....	1921	Mercer
	2	Leon C. McBride.....	1920	Mercer
Middlesex	1	Charles H. Butcher.....	1920	Middlesex
	2	Preston K. Packard.....	1920	Middlesex
Monmouth	1	Victor I. Cruser.....	1921	Monmouth
	2	George M. McVey.....	1921	Monmouth
Morris	1	Dwight M. Babbitt.....	1919	Morris
	2	Chester E. Budd.....	1920	Morris
Ocean	1	Frederick B. Doremus.....	1921	Morris
Passaic	1	J. Royle Van Arsdale.....	1919	Passaic
	2	James P. Corrigan.....	1920	Sussex
Salem	1	John S. Whitehill, Jr.....	1920	Bergen
Somerset	1	Douglas C. McCully.....	1921	Bergen
Sussex	1	Edward J. Rowe.....	1920	Sussex
Union	1	Russell J. Headley.....	1920	Union
	2	John R. Hobart.....	1921	Essex
Warren	1	Valentine C. F. Franke.....	1921	Bergen

<i>Name.</i>	<i>County.</i>	<i>Class.</i>
Willis W. Angus.....	Essex	1918
Melbourne S. Applegate.....	Essex	1918
Walter H. Beisler.....	Essex	1918
D. Hudson Bowman.....	Hudson	1918
Philip M. Brenner.....	Union	1918
William F. Buchanan.....	Gloucester	1918
Marcus A. Canfield, Jr.....	Essex	1918
Robert I. Clark.....	Bergen	1918
Domenic V. A. Della Volpe....	Hudson	1918
Searle B. Dougherty.....	Mercer	1918
Joseph H. Edgar.....	Camden	1918
Irving B. Emery.....	Bergen	1918
Louis Ginsberg	Hudson	1918
Irving Golodner	Hudson	1918
William S. Higbie.....	Sussex	1918
Harold B. Hill.....	Warren	1918
Wilgus A. Holman.....	Essex	1918
Jacob Joffe	Union	1918
Ralph S. Jones.....	Essex	1918
George A. MacDonald.....	Hudson	1918
Allister P. MacLeod.....	Hudson	1918
Ludwig Meuser	Hudson	1918
Frank M. Meyerend.....	Morris	1918
Walter R. Netzel.....	Morris	1918
Royal F. Nichols.....	Middlesex	1918
George B. Otto.....	Passaic	1918
William Patz	Essex	1918
James H. Pitman.....	Essex	1918
Joseph M. Roberts, Jr.....	Monmouth	1918
Howard M. Sheppard.....	Cape May	1918
Harry C. Smalley.....	Sussex	1918
Preston R. Smith.....	Bergen	1918
J. Harold Thomson.....	Passaic	1918
M. Joseph Truscott.....	Camden	1918
Robert L. Voorhees.....	Hudson	1918
John N. Wittpenn, Jr.....	Essex	1918
Roy E. Anderson.....	Mercer	1919
John W. Armstrong, Jr.....	Warren	1919
Daniel Balikjian.....	Monmouth	1919
Harry E. Barbehenn.....	Hudson	1919
Charles H. Y. Bellerjeau.....	Mercer	1919
Horace P. Billings.....	Camden	1919
Everett B. Bleecker.....	Essex	1919
Harry Bloom	Bergen	1919
Joseph Breckley	Atlantic	1919

<i>Name.</i>	<i>County.</i>	<i>Class.</i>
Frederick W. Bullwinkel.....	Bergen	1919
Samuel E. Burr, Jr.....	Essex	1919
Anthony E. Casale.....	Essex	1919
Cono C. Casale.....	Essex	1919
A. Daniel Cheston.....	Passaic	1919
Frank V. D. Cortelyou.....	Monmouth	1919
Joseph L. Costa.....	Hudson	1919
Harry L. Denberg.....	Hudson	1919
William A. Feitner.....	Essex	1919
Morris Goldfarb	Middlesex	1919
David Goldstein	Cape May	1919
Earl S. Harris.....	Salem	1919
M. Harold Higgins.....	Essex	1919
August W. Hock.....	Essex	1919
Charles H. Hollenbeck.....	Monmouth	1919
W. Kirby Holmes, Jr.....	Camden	1919
Jacob Jankelwitz	Union	1919
George A. Kuyper.....	Passaic	1919
Brooks C. Martin.....	Hudson	1919
Perry M. Moore.....	Hudson	1919
Alfred A. Neuschaefer.....	Essex	1919
Hugo M. Pfaltz.....	Hudson	1919
C. William Pfeil, Jr.....	Hudson	1919
Malcolm S. Pitt.....	Cumberland	1919
George H. Prall.....	Middlesex	1919
Charles E. Reese.....	Union	1919
Paul L. Robeson.....	Somerset	1919
H. Wolcott Rogers.....	Essex	1919
William Seltzer	Cumberland	1919
William V. M. Spader.....	Hudson	1919
Charles Sykes	Mercer	1919
Edwin B. Thompson.....	Hudson	1919
Harvey J. Tiger.....	Sussex	1919
Marmion R. Trimnell.....	Gloucester	1919
Jerome S. Underhill.....	Passaic	1919
Pierre Van Dyck.....	Middlesex	1919
Sheldon E. Ward.....	Morris	1919
Edward D. Warenreich.....	Essex	1919
Albert Watman	Hudson	1919
Walter C. Weller.....	Hudson	1919
Louis F. Wetterberg.....	Hudson	1919
Edgar L. Whiting.....	Hunterdon	1919
William G. Whitney.....	Hudson	1919
Cyril Wimpenny	Passaic	1919
Malcolm R. Young.....	Burlington	1919

<i>Name.</i>	<i>County.</i>	<i>Class.</i>
Bruce W. Angus.....	Passaic	1920
Clifford N. Baker.....	Salem	1920
Rueben I. Begam.....	Essex	1920
Emanuel Breikopf	Morris	1920
Francis V. Cahill.....	Hudson	1920
Graham H. Cairns.....	Hudson	1920
Herbert R. Campbell, Jr.....	Passaic	1920
Morris Cohen	Essex	1920
Emmett G. Craig	Atlantic	1920
Archer D. Crooks.....	Cumberland	1920
James J. Curran.....	Morris	1920
Robert R. Davenport.....	Essex	1920
M. Raymond Dean.....	Warren	1920
John W. De Witt.....	Hudson	1920
Edwin M. Durand.....	Union	1920
Herman E. Eisenberg.....	Hudson	1920
Andrew F. Eschenfelder.....	Essex	1920
Harry D. Feinberg.....	Morris	1920
William R. Felton.....	Mercer	1920
Eric Fleming	Cape May	1920
Sollie H. Flitman.....	Essex	1920
Eli Frankle	Hunterdon	1920
Harold M. Froehlich.....	Essex	1920
James P. Gibson.....	Middlesex	1920
Samuel A. Goldstein.....	Atlantic	1920
William G. Gray.....	Bergen	1920
Warren L. Griffin.....	Essex	1920
Frederick A. Hall.....	Passaic	1920
Kenneth C. Hand.....	Ocean	1920
William H. Hendrickson, Jr.....	Monmouth	1920
Joseph A. Howard.....	Mercer	1920
J. Harold Johnston.....	Bergen	1920
Joseph J. Karp.....	Hudson	1920
David Kelly	Middlesex	1920
Rufus E. Kleinhans.....	Middlesex	1920
Samuel E. Kramer.....	Hudson	1920
Albert Lauber	Passaic	1920
Loring R. Lecraw.....	Union	1920
Joseph S. Loder.....	Hudson	1920
Paul W. Lukens.....	Union	1920
Charles Metz, Jr.....	Essex	1920
Allen W. Nobbe.....	Hudson	1920
Francis W. Petit.....	Camden	1920
Morris A. Pierce.....	Monmouth	1920
George W. Prove.....	Mercer	1920

<i>Name.</i>	<i>County.</i>	<i>Class.</i>
C. Walter Rice.....	Sussex	1920
Michael F. Rubin.....	Passaic	1920
Walter Ruck	Hudson	1920
Benjamin H. Schlain.....	Essex	1920
Louis Shapiro	Essex	1920
Louis Siegel	Essex	1920
Israel W. Simon.....	Essex	1920
Perry D. Smith.....	Camden	1920
Robert H. Stahl.....	Bergen	1920
Leland L. Taliaferro.....	Morris	1920
Howard H. Thomas.....	Burlington	1920
Herbert L. Tilton.....	Gloucester	1920
Richard S. Vose.....	Essex	1920
Howard S. Wilcox.....	Hudson	1920
John J. Albert.....	Essex	1921
Sidney Alexander	Passaic	1921
C. Van Dolah Bissey.....	Hunterdon	1921
Raymond L. Broome.....	Morris	1921
Irving W. Buckalew.....	Hudson	1921
Samuel H. Chovenson.....	Cumberland	1921
Sam Cohen	Passaic	1921
Harry H. Cox.....	Union	1921
John L. DeVries.....	Essex	1921
Charles A. Doehlert.....	Bergen	1921
Clarence A. Drake.....	Hudson	1921
J. Avery Dunn.....	Essex	1921
Solomon Eisenberg	Union	1921
Walter E. Fleming.....	Essex	1921
John G. Fritzinger.....	Middlesex	1921
William H. Gaub, Jr.....	Middlesex	1921
Simon S. Gittleman.....	Essex	1921
Herman D. Goldfarb.....	Hudson	1921
Howard M. Goldy.....	Burlington	1921
Arthur F. Haelig.....	Somerset	1921
Charles J. Halbeisen.....	Camden	1921
Samuel D. Hoffman.....	Hudson	1921
Clayton G. Huffman.....	Warren	1921
B. Ralph Jacobs.....	Union	1921
John W. Jones.....	Ocean	1921
Ronald B. Kirk.....	Essex	1921
Carl L. Knitterscheidt.....	Hudson	1921
Theodore Koerner	Essex	1921
Herbret A. Kohn.....	Essex	1921
Max Levin	Mercer	1921
Henry L. Mason.....	Mercer	1921

Paul R. Molineux.....	Hudson	1921
Paul V. I. Nielsen.....	Middlesex	1921
Bishop A. Oxenford.....	Hudson	1921
Charles E. Paxton, Jr.....	Hudson	1921
Cornelius A. Perry.....	Monmouth	1921
William C. Perry.....	Passaic	1921
George E. Pierce.....	Hudson	1921
Sam Ravitz	Essex	1921
W. Rei Robbins.....	Passaic	1921
William H. Robinowitz.....	Essex	1921
Aaron Roth	Morris	1921
Morris Ruchaisky	Essex	1921
Elwood S. Skillman.....	Somerset	1921
Harris Solman	Mercer	1921
Howard M. Spooner.....	Camden	1921
Morris Spritzer	Hudson	1921
Leo Steiner	Hudson	1921
Robert B. Stone.....	Hudson	1921
Donald Van Brakle.....	Monmouth	1921
George J. Van Derveer.....	Monmouth	1921
John R. G. Van Winkle.....	Bergen	1921
Garrett S. Voorhees, Jr.....	Sussex	1921
Samuel Waldman	Essex	1921

All of which is respectfully submitted.

JAMES NEILSON,

President of the Board of Visitors.

Report of the Board of Trustees

To His Excellency, Walter E. Edge, Governor of the State of New Jersey:

SIR:—In compliance with an Act of Congress, approved July 2d, 1862, and an Act of the Legislature of New Jersey, approved April 4th, 1864, I beg leave to submit, on behalf of the Trustees of Rutgers College, the fifty-third annual report of Rutgers Scientific School, now designated also the State University of New Jersey. It is included in the Statement made to the Trustees by the President of the College at the close of the academic year 1916-17, and in the catalog of the college issued by the Faculty. You will find in these the full registry of the Board of Trustees, the Faculty and students, a description of all courses of study, of entrance requirements, of property and equipment, full details of general information, and some discussion of matters of particular moment in the record of the year.

Respectfully submitted,

W. H. S. DEMAREST,

President of the Board of Trustees.

October 31st, 1917.

STATEMENT

OF THE

PRESIDENT

WITH

REPORT OF THE DEAN

AND

REPORT OF THE LIBRARIAN

RUTGERS COLLEGE

1916-1917

To the Trustees of Rutgers College:

During the college year now closed two members of our Board have resigned and several new members have been chosen. Mr. David Bingham, of East Orange, the member longest in service, having become a trustee in 1882, presented his resignation owing to inability to attend the meetings; it was received and it was accepted April 18th, 1917, with sincere regret and with deep appreciation of his long service. At commencement, 1917, Mr. Howard Elting, of Chicago, of the class of 1890, completed his five-year term as alumni trustee. Mr. J. Amory Haskell, of Red Bank, elected January 11th, 1916, took the oath of office January 9th, 1917. Mr. Ernest R. Ackerman, of Plainfield, was elected October 13th, 1916, and took the oath of office November 24th, 1916. The Hon. Joseph S. Frelinghuysen, of Raritan, was elected April 13th, 1917, and will take the oath of office at the next meeting. General Louis W. Stotesbury, of New York City, of the class of 1891, having been nominated by the alumni for the term 1917-1922, was elected June 12th, 1917, and will take the oath of office at the next meeting. The Hon. Walter E. Edge, Governor of the State, was present at the meeting June 12th, 1917, and as ex-officio trustee took the oath of office on that day. There remain at the present time two vacancies in the membership of the Board.

The college has lost by death its beloved and honored Emeritus Professor of Ethics and the Evidences of Christianity, the Rev. Charles Edward Hart, D.D. He died December 15th, 1916, after very brief illness. Dr. Hart was born at Freehold, N. J., February 28th, 1838. He was graduated from Princeton College in 1858 and from Princeton Theological Seminary in 1861. From 1861 to 1866 he was pastor of the Murray Hill Presbyterian Church, New York City, and from 1866 to 1880 he was pastor of the North Reformed Church, of Newark. He became Professor of English Literature at Rutgers in 1880, and Professor of Ethics and Evidences of Christianity and the

English Bible in 1897. He was made Emeritus Professor in 1907. "Dr. Hart's service to Rutgers College has been long and faithful and fruitful and at times arduous. He has stood among us tall of form, true to the type of Christian manhood—a scholar, courteous, kindly, refined in taste and bearing, and in the possessions of his acquisitive mind."

The senior member of the Faculty, Francis Cuyler Van Dyck, Professor of Physics, retires from his active work with the close of this academic year. It is a notable event in the life of the college. More than fifty years ago Dr. Van Dyck was graduated from the college and for more than fifty years he has been connected with its teaching staff. He has received four degrees from his Alma Mater: A.B. in 1865, A.M. in 1868, D.Sc. in 1910, and LL.D. in 1915; and he received the degree of Ph.D. from Union College in 1888. He became Tutor in Chemistry in 1866, Professor of Chemistry in 1870, and Professor of Physics in 1880. During the years 1901 to 1913 he also filled the office of Dean. Serving with remarkable devotion through all the years, with rare scientific skill and singularly fine personal spirit, he commands the respect and affection of all the college generations that have come within the reach of his influence. Impaired health has compelled him to ask relief from the burden of regular work, though renewal of strength is anticipated, and he has been given the title of Emeritus Professor from July 1st, 1917. The Carnegie Foundation for the Advancement of Teaching has recognized his long and noble service by the vote of a substantial retiring allowance.

More special Faculty arrangements than usual have been necessary during the course of the year. Professor Van Dyck gave up his active work early in March; it proved possible, however, for Mr. Mayne S. Mason, Instructor, to assume it and carry it to the end of the year. Professor W. E. Breazeale, of the department of mathematics and astronomy, has been ill all the year; William David Rees (B.A. Ohio University) was secured to carry his work in mathematics, and the courses in astronomy have been omitted. Associate Professor Frank R. Pratt, of the department of physics, has had leave of absence

for the year, and his work has been carried on by Morell Brainard Baker (A.B., A.M., University of Michigan). Dr. Norman S. Parker, Instructor in History, was compelled by ill health early in the year to withdraw from his work, and Mason Whiting Tyler (Ph.D. Harvard), of Princeton University has filled his place. Dr. Louis Bevier, Professor of Greek and Dean, was withdrawn from his teaching work from November 1st, to carry on the endowment campaign among the alumni; his work was divided between Dr. William H. Kirk, Professor of Latin, and the Rev. John A. Dewald, of New Brunswick. Associate Professor William B. Twiss, of the department of English, withdrew before the end of the year to enter the Officers' Reserve Training Camp. In order to fill out certain work of the year Edward Francis Johnson (A.B. Rutgers, 1901) was appointed Instructor in English and in German; and William David Sturgeon (M.A. University of Glasgow, 1913) was appointed Assistant in French.

Dr. Clarence Ward, Associate Professor of Architecture, having accepted a call to be Professor of Fine Arts and Director of the Art Museum at Oberlin College, remained at Rutgers until December 1st, 1916, in order to carry out his work as chairman of the 150th Anniversary Celebration Committee. His resignation taking effect at that time, the course in architecture was carried on by Sherley Warner Morgan, A.B., of Princeton University, until Mr. Morgan was called to military service immediately on the declaration of war. Mr. George A. Williams, Instructor in Ceramics, resigned December 31st, 1916, to enter industrial connection.

The following resignations take effect June 30th, or September 30th, 1917:

Captain Shelby C. Leasure, Professor of Military Science and Tactics; Dr. Charles B. Lewis, Professor of Hygiene; Frederick C. Minkler, Professor of Animal Husbandry (who will continue as Lecturer); William J. Carson, Professor of Dairy Husbandry; Dr. Ralph O. Smith, Associate Professor of Chemistry; Dr. Henry B. North, Associate Professor of Chemistry; Dr. Norman S. Parker, Instructor in History; Lloyd S. Riford,

Instructor in Dairy Husbandry; Roy F. Irvin, Instructor in Poultry Husbandry; Clifford J. Colville, J. Claude Thomson and Edward R. Schmid, Assistants in Chemistry; Sergeant Charles F. Siebert and Sergeant Algot Erlander, Assistants in Military Science; William J. Hazel, Assistant in Physical Training; Daniel S. Smart, General Secretary of the Y. M. C. A. Mayne S. Mason, Instructor in Electrical Engineering, will receive leave of absence for service in the aviation corps.

The following promotions take effect July 1st, 1917: Augustine W. Blair, A.M., from Associate Professor to Professor of Agricultural Chemistry; Frank R. Pratt, M.Sc., from Assistant Professor to Associate Professor of Physics; Albert R. Johnson, B.Sc., from Assistant Professor of Mathematics and Graphics to Associate Professor of Graphics and Civil Engineering; Frank App, B.S., from Assistant Professor to Associate Professor of Agronomy; Leigh W. Kimball, A.M., from Instructor to Assistant Professor of Romance Languages; Lyman G. Schermerhorn, B.S., from Instructor to Assistant Professor of Vegetable Gardening; Bryce I. MacDonald, B.Sc., from Assistant to Instructor in Chemistry; George A. Osborn, B.Sc., Librarian, appointed to the Faculty with rank equal to Associate Professor.

The following appointments have been made:

Major John Bigelow, U. S. A., retired, Professor of Military Science and Tactics. Major Bigelow was graduated from West Point in 1877 and became in succession 2nd Lieutenant, 1st Lieutenant and Captain in the 10th Cavalry. In 1902 he became Major in the 9th Cavalry, and in 1904 he was retired at his own request. From 1887 to 1889 Major Bigelow was Adjutant General of District of Columbia Militia; from 1894 to 1898 he was Professor of Military Science at Massachusetts Institute of Technology, and from 1904 to 1910 he was Professor of French at the same institution.

David Fales, Jr. (A.B. Harvard University, 1897; A.M. Harvard University, 1899; B.D. Chicago Theological Seminary, 1902), Hill Professor of the English Bible. From 1902 to 1915 he was pastor of the Congregational Church at Galesburg, Ill.;

from 1907 to 1915 he was also Professor of Biblical Literature at Knox College; since 1915 he has been Professor of Biblical Literature and Applied Religion in Colorado College. Mr. Fales has now asked leave of absence to attend the Officers' Reserve Training Camp and this has been granted.

Otis Amsden Gage (Ph.B. Rochester University, 1899; Ph.D. Cornell University, 1910), Professor of Physics. He was teacher of science in Geneva High School from 1899 to 1901, Assistant in Mathematics at Rochester University from 1901 to 1903, and Instructor in Physics at Cornell University from 1904 to 1907. Since 1907 he has been Assistant Professor of Physics at the University of Wisconsin.

William M. Regan (B.S., 1912; M.S., 1914, University of Wisconsin), Professor of Dairy Husbandry. Since 1914 he has been Assistant Professor of Dairy Husbandry at the University of Nevada.

Oscar Leonard Barnebey (B.S., 1908; M.A., 1909, University of Nebraska; Ph.D., 1912, University of Wisconsin), Associate Professor of Chemistry. From 1908 to 1910 he was Instructor in Chemistry at the University of Nebraska, and since 1910 he has been Instructor in Chemistry at the University of Wisconsin.

Hugh Byron Gordon (B.A., 1908, Miami University; M.S., 1910; Ph.D., 1912, University of Illinois), Assistant Professor of Chemistry. After service in U. S. Food and Drugs Inspection Laboratory and as substitute professor at the University of Oklahoma, 1912-13, he became Assistant Professor of Chemistry, later Associate Professor, and recently acting head of the department at the State College of Texas.

Willis Barnes Combs (B.S., 1915; M.S., 1917, University of Missouri), Instructor in Dairy Husbandry. Frank Nicholas Egerton, Jr. (A.B., 1909; A.M., 1911, Trinity College, N. C.), Instructor in Electrical Engineering; from 1911-13 he was graduate student at Columbia University; in 1913-14 he was instructor at Trinity College, and since 1914 he has been Instructor in Electrical Engineering at Princeton University. Ralph Emerson Danforth (A.B., 1908, University of Michigan),

Assistant in Biology. Frank Dunstone Graham (A.B., 1913; LL.B., 1915, Dalhousie University), Assistant in Political Science; since 1915 he has been graduate student at Harvard University, holding in 1916-17 the Leverett Saltonstall Scholarship and serving as Assistant in Political Theory. Roy Francis Layton (B.Sc., 1917, Rutgers), Assistant in Chemistry. John Lawrence Pitt (A.B., 1917, Rutgers), Assistant in Military Training.

Professor Walter B. Pitkin, of Columbia University, will give the course in ethics during the first half year.

Laurance Phillips Runyon (B.Sc., 1899; M.Sc., 1903, Rutgers; M.D., 1903, Columbia), will be College Physician.

John F. Anderson (M.D., 1896, University of Virginia), will be Lecturer in Hygiene.

George Ferree Leonard (A.B., 1907, University of North Carolina; M.D. George Washington University, 1912), will be Lecturer in Bacteriology.

Eugene C. Brown (Columbia) will be General Secretary of the College Y. M. C. A.

The great event of the year was the Celebration of the 150th Anniversary of the founding of the college. It was held from October 12th to October 15th, and was a success even beyond expectations. It was very largely attended—more than 150 colleges and universities being represented, including institutions abroad, and about 1,000 alumni being present at one time or another beside a multitude of the friends of the college. The exercises were carried out with great dignity and appropriateness. The addresses were of a high order and worthy of the occasion in every way. The pageant held at the College Farm was admirably conceived and splendidly presented by members of the college and citizens of New Brunswick. Too much praise and grateful acknowledgment cannot be given to the committee in charge. The chairman, Professor Clarence Ward, was the immediate leader in all the work, and Professors Louis Bevier, Edmund W. Billetdoux and Ralph G. Wright were associated with him, beside Mr. George A. Osborn, Librarian, and Mr. Earl R. Silvers, Field Secretary of the Alumni. The Celebra-

tion Book has now been issued, containing full account of the proceedings with full text of all addresses and with many illustrations. Professor J. Volney Lewis has been chairman of the committee to issue this publication, and has brought out an admirable volume. Several other publications have been issued in connection with the anniversary. A new edition of the General Catalogue of Trustees, Faculty, Alumni and Students was compiled by the Rev. Dr. John H. Raven, the college Biographer. It is very complete in its contents and a monument to the devotion and untiring efforts of Dr. Raven. Class Histories have appeared—ten of them at least, and others will appear later; they contain full biographical accounts of the class members. It was proposed also to issue a Rutgers College bibliography. The copy is quite completely prepared and the work will be put forth probably in the course of the coming year. It is in charge of Augustus H. Shearer, Ph.D., of the class of 1899.

The registry of the college has been the largest in its history. Freshmen were admitted to the number of 212, and 205 actually matriculated; one student was added to each upper class, the senior, the junior and the sophomore. There have been 27 graduate students representing about 20 different colleges and universities of the United States. The total number of undergraduates has been 510. The summer session 1916 was attended by 626 students, and the short courses in agriculture 1916-17 by 140 students. The college year began two weeks late owing to the epidemic of paralysis in this part of the country, and this was not the only interference with usual routine. The anniversary celebration affected it for a week or two after its opening. Two or three isolated cases of scarlet fever later in the year compelled brief separation from college of large groups of students at different times, but fortunately all spread of the disease was prevented. In the spring on the declaration of war the students responded with patriotism to the call of the country, and many withdrew to enter the different departments of national service or to undertake work in other fields which seemed closely related to the national welfare. Before the close of the year over 200 students had thus withdrawn with the approval of the Faculty.

They were given the credit for their courses which obtained at the time of their withdrawal. If it was above grade at that time it was counted as a full year's work; if it was below grade the deficiency of necessity maintained, but special opportunity will be given for the removal of such deficiency, when return to college may be possible. Naturally the entire work of the college was more or less disturbed and some appointments were canceled. The athletic schedules were shortened. As a whole the students met the situation in excellent spirit and maintained the ordinary routine with good degree of faithfulness.

The military department naturally has been of supreme importance during the latter part of the year. It was emphasized from the year's beginning by the new requirement that all freshmen and sophomores take the course. The college also came under the new act passed by the United States Congress, establishing Officers' Reserve Training Corps. The juniors and seniors, being relieved from the required course in military science, have privilege of electing it under the special arrangements of the War Department attaching with the Officers' Reserve Training Corps. After the declaration of war the hours assigned the department were increased and an additional voluntary company of cadets was formed. The battalion was greatly reduced before the year's end by the retirement of men for active service of some sort and many of the students are now at Fort Myer or in other training camps or in other form of national service. The battalion participated in the parade of students of colleges and universities in New York City, and made an extremely creditable appearance. They had the head of the line and received most favorable comment. The work done by Captain Shelby C. Leasure in developing the work during the last two years deserves special mention. The college has also been interested in the organization of the Home Defense League in the city of New Brunswick. Many of its members have participated in the active organization and the Gymnasium has been allowed to it as a drill room. A registration plan has also been carried out under the auspices of a committee of the Faculty, making record of all the Faculty, alumni and students in their varied

possibilities of national service as demand may from time to time arise. The Governor of the State of New Jersey appointed the college as the place for the holding of examinations under the new United States Act for candidates who desire to be reported as eligible for further examination for entrance at West Point. The following resolution was passed by the trustees: "The Trustees of Rutgers College assure Governor Edge of the loyal readiness of the institution to cooperate with him in the service of the state and the nation at this time of emergency and special responsibilities. They wish to make the resources of the college, its land, buildings, equipment and educational forces serve the national cause in every possible way. They especially suggest that the facilities of the agricultural, engineering and military departments may be useful in the immediate movements undertaken by the State and Federal Governments."

The following further resolutions were passed by the Faculty and approved by the Board of Trustees:

"WHEREAS, The Congress of the United States has resolved, and the President has proclaimed that a state of war exists between the United States and the Imperial German Government, and

"WHEREAS, The Faculty of Rutgers College recognizes in this resolution and this proclamation an emergency which will demand the loyal service of all citizens and of all institutions of the Nation, so far as they can aid in the attainment of the common purpose and in hastening the coming of a righteous peace; therefore, be it

"*Resolved*, That we, the Faculty of Rutgers College, pledge our unqualified loyalty, and our fullest cooperation with the Government in all matters in which our time or our powers may be of use, or in which the educational agencies of our college may be able to cooperate;

"*Resolved*, That appropriate action will be taken for granting leave of absence without loss of academic standing to all undergraduates who may enlist or be draughted for active service in the army or navy, or who may be called to civil employment by the Government; and

“Resolved, further, to this end, that any members of the senior, junior, sophomore, or freshman classes, whose services may be required by the Nation before the end of the present academic year, will be permitted to qualify for graduation or for promotion to the next higher class as soon as the call comes, and will not be required to be present at the regular final examinations.”

Ten years having elapsed since an at all extensive revision of curriculum had been made, a committee of the Faculty undertook careful study of the existing courses of study and on recommendations made by it the Faculty adopted a substantial revision of considerable importance. The changes relate in greater degree to the liberal courses than to the technical courses. One change in the arrangement for technical study is that a free elective is allowed for junior year and one for senior year in the place of the heretofore required study of a particular liberal subject. Students in the sophomore class are given more choice of elective according to a group system. Eleven courses of liberal study are offered from which each student must choose five. The juniors and seniors then in turn elect their liberal studies in group, one major and two minors. Two items of great value in the revision are the required course in civics, in the privileges and duties of citizenship, which will be given by Dr. Austin Scott to the sophomores, and the required course in hygiene which will be given by the College Physician to the freshmen. A new system of dealing with absences has been established which has resolved itself in ordinary reference to a cut system. It is not certain that it has through its first year worked with entire satisfaction to the Faculty. It has not had sufficient time, however, for a final test.

The general life of the student body has been excellent, and the college has been without seriously untoward incident throughout the year. The Senior Council proves to be an admirable instrument of the students themselves for the proper management of their affairs and their relation to the college proprieties. The Young Men's Christian Association has had a year of rather unusual activity. The general secretary, Mr. Daniel S. Smart, has organized the work with discretion and energy, and has had loyal following and cooperation from the students. The work in find-

ing employment for students has been particularly notable. Bible study has been maintained in virtually all the fraternity and club houses. Social service has been taken up and deputations for religious service have gone to various places in New Brunswick and elsewhere in the State. The weekly meetings of the association have been well sustained and have been addressed from time to time by men of distinction in Y. M. C. A. work. Under the auspices of the association a gift of about \$1,000 was secured from the students for war relief. The trustees have taken renewed action on the subject of the establishing of new fraternities. This action is as follows:

"No intercollegiate fraternity connection shall be established at any time without consultation with the trustees and approval by them—the standing of the students concerned, the quality of the fraternity proposed, precedence of organization and the general welfare of the college being taken into consideration.

"No residence club shall be established at any time without consultation with the trustees and approval by them.

"The trustees place on record their present judgment that it will not be advisable to approve or allow further organization of intercollegiate fraternities in the near future."

A study has been made by the Dean, Dr. Louis Bevier, touching the relation of athletics to scholarship and also another study touching the relation of undergraduate scholarship and later life success. These studies are very significant and well worth the attention of all interested in the values of college life.

The summer school had the largest attendance in 1916 of any year since it was started. The work of the session was carried through with marked success in spite of the extreme heat which prevailed during almost the entire summer. The attendance in 1917 has been reduced less than was anticipated owing to the varied effects of the war situation and about 500 students are in attendance. The short courses in agriculture had a slightly less attendance than obtained a few years ago: this is readily explained by the higher standard required. Extension work has been carried on in several localities. The project of a woman's college comes into new consideration from time to time and there

is an earnest hope as well as some urgent effort looking to the establishment of such an institution in affiliation with Rutgers in the near future. The trustees have approved the admission of women to courses of graduate study looking to advanced degree, and the first woman student under this arrangement is now registered. Women are also admitted to the short courses and to the summer session. There is, however, a general and decisive feeling and judgment against co-education in the undergraduate classes. The admission of women as undergraduates must necessarily wait until the funds are available and the arrangements possible for their admission to an affiliated college.

The activities of the alumni have been specially fruitful, perhaps, in the forming of the Alumni Council. This has been organized somewhat after the manner of such council heretofore active in other colleges and universities. Its creation of certain committees charged with special responsibility for certain fields of the college welfare has justified itself in the energetic work of these committees. There is every reason to anticipate a growing activity and constantly increasing values in the system which has been established. Mr. Ralph W. Voorhees, of the class of 1916, has been made Field Secretary of the Association, succeeding Mr. Earl R. Silvers, of the class of 1913, who has become Assistant to the President. A new local alumni club has been formed in Bergen County, New Jersey, with headquarters at Hackensack, and one in New England, at Hartford, Conn. Steps are also being taken for the establishing of such a club at Kingston, N. Y. The annual dinner of the alumni in New York City was well attended, and was a very successful social occasion. The gathering of alumni at the celebration dinner in New Brunswick in October was remarkable, nearly 1,000 alumni being in attendance; and the demonstration on Saturday afternoon in parade through the city, and at the athletic field, was gratifying in the extreme.

The property change most notable in the record of the year is that at Kirkpatrick Chapel. Mr. William P. Hardenbergh, at an expense of over \$13,000, undertook to make changes which seemed necessary in order to provide more room for the increased student body. The interior walls which divided the chapel room

from lecture rooms and offices were torn down, a chancel was built and various interior details were developed in a consistent architectural and artistic way. The change, almost complete, was accomplished in the two months between the close of the summer session, August 12th, and the anniversary celebration, October 12th, a remarkable achievement made possible by the incessant attention of the architect and the devoted energy of the contractors and everyone concerned. The result has surpassed all expectations. With slight additional changes during the course of the year the room has become attractive and satisfying to the last degree. The portraits have been hung in most appropriate ways, and the special gifts introduced have added to the charm of the room. Mr. Henry J. Hardenbergh was the architect of the building at its erection and has now been in charge of this work. He made a personal gift of a window in the chancel in memory of his great-great-grandfather, Rev. Dr. Jacob R. Hardenbergh, first President of the college. Mrs. William J. Wright, of Boston, at a cost of \$10,000, gave a new organ, accommodation for which has been built in the chancel. The gift is a memorial to George Buckham, Esq., of the class of 1832, her father. The organ is most satisfactory in every way and adds greatly to the enjoyment of the religious services and other public occasions held in the chapel. A tablet in memory of Hendrick Fisher, first President of the Provincial Congress of New Jersey and the leading layman in the founding of the college, was presented by the New Jersey Society of Colonial Wars; a tablet in memory of the Rutgers men who served in the Civil War, bearing one hundred and two names, was presented by the class of 1880; a tablet to Rev. Dr. Philip Milledoler, President of the college from 1825 to 1840, was given by his grandson, Mr. Gerard Beekman; a portrait of Dr. Austin Scott, lately President of the college, was given by the class of 1916 at its graduation; and a portrait of President Demarest, which was given to him by the alumni at the celebration in October, is also hung on the chapel wall. At commencement, 1917, a portrait of Rev. Dr. John Croes, first Bishop of New Jersey, who maintained the Grammar School from 1801-1808 when that was the only active life of the college,

was presented by Mr. Charles A. Bloomfield, who married a granddaughter of Bishop Croes; and a portrait of Samuel Oakley Vander Poel, Sr., trustee and devoted supporter of the college, was presented by his son, Dr. John Vander Poel, of the class of 1878.

Other improvements to the property were made in more than usual annual amount in order that the property might be in best condition for the anniversary time. The Queen's building received its trim of white for the first time in perhaps 50 years, and with result very gratifying to all the college community. The singularly fine lines of the building have been brought out in greater clearness and the colonial character of the building has been emphasized. On its outside wall a tablet in memory of the Rutgers men who fought in the Revolutionary War was placed by the New Jersey Society of the Sons of the American Revolution. In the interior of this building the old chapel room was improved and made the fine arts room. Considerable improvements were also made at Van Nest Hall, at Winants Hall, and at Ballantine Gymnasium. Since the anniversary time the street between the Queen's campus and the Neilson campus from College Avenue to George Street has been paved; and the telegraph poles have been removed through the generous interest and courtesy of the Public Service Company and other companies concerned. The block on George Street between Hamilton Street and Somerset Street, at the east end of the campus, has also been repaved. Additions have been made to the College Farm; and very extensive improvements have been made at Neilson Field through the generous undertaking of a syndicate of the alumni.

There are certain very urgent needs of the college which must be again mentioned that, if possible, the way be opened to satisfy them. It is imperative that a student building, perhaps to be called a Young Men's Christian Association Building, be built, that the students may have a place for recreation, for social life, for organization offices, for meetings, and for the housing of all common student interests. A Physics Building is absolutely necessary for the proper maintenance and development of the work in that department. The physics is now confined in very

narrow quarters in the Geological Hall, which is largely given up to the geological museum and to the department of geology and mineralogy. The subject of physics is of extreme importance in itself and as the basis for the engineering courses. A new recitation building should be provided to take care of ordinary class work, removing it further from the railroad and leaving Queen's building more largely for administration purposes. An armory is needed for the proper conduct of battalion drill during the time outdoor work is impossible. At this time military training of young men is so extremely important and so urgently called for that it is very unfortunate that a proper room should not be provided for the battalion of several hundred young men enrolled at Rutgers.

During the year the college has received very substantial gifts for property or general endowment, or special purposes. The total amount is over \$155,000. The Hill Professorship of the English Bible has been established by a gift of \$60,000. There has been added to endowment over \$100,000. Nearly \$4,000 has been received in final payment from the Kirkpatrick estate. Mr. L. F. Loree, of the class of 1877, and Hon. W. W. Crapo have united in increasing the Jacob Cooper Memorial Prize in capital amount from \$1,000 to \$2,000, and Mr. Loree has given generously for the renovation of the history room in Van Nest Hall and for the maintenance of the course in French conversation. Mrs. Robert F. Ballantine has given \$1,000 for the installation of heating apparatus in the new gymnasium room above the swimming pool. A constant and generous friend has given \$6,000 for the purchase of land adjacent to the College Farm, and also has given \$15,000 to pay the deficiency of the college year 1915-1916. He has also now offered a gift of \$50,000 to be applied on the standing debt if \$30,000 additional is raised to pay the deficiency of the current year 1916-1917. This deficiency is much larger than usual for very apparent reasons. The anniversary celebration cost about \$12,000. The campaign for new endowment has cost about \$2,500. The general catalogue has cost about \$1,200. On the Hamilton Street paving \$1,000 has been paid. Nearly \$2,000 has been called for to meet special

teaching emergencies. About \$5,000 was expended on the ordinary and extraordinary repairs to property.

Several matters of special interest in the State connection ought to be recorded. The Legislature at its session 1917 passed an act designating the State College to be also the State University of New Jersey. This action seemed appropriate in view of the university functions into which the college has come in the course of natural development through recent years, and also in view of the wide and varied work which it will be further called upon to fulfill. An act was also passed authorizing the filling of scholarship vacancies by appointment of students appropriately qualified. An act was passed changing the method of electing members of the Board of Visitors from representation of congressional districts to representation of counties. The appropriations made by the Legislature for the maintenance of work by the State College have been along the usual lines with some slight variations. Items were included in the supplemental bill for additional maintenance of summer session, courses in chemistry, courses in education, and for the erection of a calf barn. Items in the annual bill were for short courses in agriculture, summer session, scholarships, reference books and periodicals, farm grounds, farm buildings, maintenance of agricultural building, erection of calf barn, ceramics, land grant interest, and for the maintenance of courses in agriculture, engineering, chemistry, military science, education, and sanitary science and sanitary engineering. The appropriations from the Federal Treasury have been received as usual: the Morrill-Nelson Fund for instruction; the Hatch and Adams Funds for research, and the Smith-Lever Fund for extension work. The Smith-Hughes Act passed by the United States Congress for the maintenance of vocational training placed the responsibility for this work in each State without designating the agency within the State. The Legislature named the State Board of Education. This Board will organize the work of vocational training in a general way, and the college will possibly assist it in carrying out the work of training vocational teachers.

The Library now numbers more than 90,000 volumes, 5,000

having been added during the course of the year, rather more than one-half of the addition being by gift and the remainder by purchase. The gifts have come from many sources and represent many varied interests. A gift of special note is that of 1,000 books or more from the library of the late Professor Charles E. Hart, several departments being thus much enriched. It is most gratifying that so many friends and especially that so many alumni continue constantly to make valuable donations to one department or another of the library collections. A special need of Spanish literature is at this time emphasized. The Librarian in connection with the chairman of the Library Committee of the Faculty has formulated a plan of possible endowment of various library departments, and it is earnestly hoped that friends and alumni will be in communication either with the Librarian or the President of the college as to possible undertaking of endowment in this connection. The historical exhibit especially arranged at the time of the celebration, and added to then by loans from various sources, was interesting in the extreme. Very notable additions to such college collection are the greetings of colleges and universities sent in distinguished form at the time of the anniversary. The library staff has been changed by the resignation of Mrs. George W. Martin, Assistant Librarian, who was connected with the library for more than six years. Mr. George A. Osborn, with the close of this college year, concludes 20 years of connection with the library and 10 years in the full office of Librarian. His work has been notably intelligent, faithful and fruitful, and the library has a reputation for being remarkably serviceable to all who seek to avail themselves of its advantages. The number of volumes is probably three times as great as it was when Mr. Osborn first became connected with the work. It is about twice as large as it was when the books were moved to the new building in 1904.

The Preparatory School has had a very satisfactory year save for the fact that there was a serious loss from the number of boarding students at the dormitory during the course of the year. Several cases of illness and several cases of unsatisfactory student quality were the occasion of this loss. About 40 students

in all were at the dormitory and there were 194 students in the entire school. Some permanent improvements have been made to the property during the course of the year. The teaching staff has been in general satisfactory, but an almost completely new corps of instructors will be necessary the coming year for various reasons, especially the demands of the war service. An association of the graduates and sometime students of the school has been formed with promise of good interest and helpful cooperation.

The work of the Experiment Station has been maintained as usual with progressive undertakings and excellent results. It is earnestly hoped that an Engineering Experiment Station, corresponding to the Agricultural Experiment Station, will be founded in the near future. Two or three bills looking to this object are now before Congress.

The chapel services have been maintained with a program of preachers representing the various denominations. The list of these preachers will be found in the appendix to this report together with the list of speakers and lecturers in various connection during the year, including also the lecturers on the Kellogg foundation. It is worthy of note that on this foundation the college and the city have been privileged to hear Ex-President Taft, Commissioner Arthur Woods, and Ralph Connor. A course of musical evenings arranged during the winter was very successful both in the quality of the programs and in the interest shown by the community. The musical interests of the college have received great impetus through the installation of the new organ and the appointment of Mr. Howard D. McKinney, of the class of 1913, as Director of Music. A special feature of his work has been organ recital on Sunday afternoons at 5 o'clock during the spring.

At commencement 10 students received the degree of Bachelor of Arts; 15 the degree of Bachelor of Letters; and 52 the degree of Bachelor of Science—77 in all receiving the Bachelor's degree. All save 5 were present at the formal exercises, even those enrolled at Fort Myer and Plattsburg being allowed to return for the occasion. Advanced degrees were conferred upon 14 candi-

dates: 1 Bachelor of Divinity, 5 Master of Science, 2 Civil Engineer, 2 Electrical Engineer, 4 Doctor of Philosophy. Eight honorary degrees were conferred: the degree of Master of Science on Henry Granville Sharpe, sometime member of the class of 1879, Brigadier General, U. S. A.; the degree of Master of Arts on Henry Brewster Willis, Superintendent of Education for Middlesex County; the degree of Master of Science on George Washington Goethals, lately Engineer of the Panama Canal, and on Dr. Victor G. Heiser, lately Health Officer of the Philippines; the degree of Doctor of Divinity on Rev. Eugene Samuël Booth, graduate of the class of 1876, Missionary of the Reformed Church in Japan, and on the Rev. Edwin S. Lines, Bishop of Newark; and the degree of Doctor of Laws on Leonor Fresnel Loree, graduate of the class of 1877, President of the Delaware and Hudson Railroad Company, and on Hon. Walter Evans Edge, Governor of New Jersey.

Record is here made also of the honorary degrees conferred at the Anniversary Celebration, October 14th, 1916: the degree of Master of Arts on Austin Wakeman Scott, graduate of the class of 1903, Professor of Law at Harvard Law School, and on Henry Janeway Hardenbergh, great-great-grandson of President Hardenbergh, architect of Kirkpatrick Chapel; the degree of Doctor of Science on John Livingston Rutgers Morgan, graduate of the class of 1892, Professor of Physical Chemistry at Columbia University, and on Baron Chuzaburo Shiba, of the University of Tokyo, Japan, and on Peter Cooper Hewitt, scientist and inventor; the degree of Doctor of Letters on Mrs. Margaret Campbell Deland; the degree of Doctor of Divinity on Rev. Elisha Brooks Joyce, lately Rector of Christ Church, New Brunswick, N. J., on Rev. David James Burrell, Senior Minister of the Collegiate Church, New York City, and on Rev. Ame Vennema, President of Hope College and lately President of the General Synod of the Reformed Church; the degree of Doctor of Laws on Ernest Martin Hopkins, President of Dartmouth College, on Robert Elliott Speer, graduate of Princeton, Secretary of the Board of Foreign Missions of the Presbyterian Church, on Edwin Robert Walker, Chancellor of the State of New Jersey, on Joseph

Hodges Choate, graduate of Harvard, statesman and diplomatist, and on W. L. F. C. van Rappard, Ambassador from the Netherlands to the United States.

Respectfully submitted,

W. H. S. DEMAREST,

June 30th, 1917.

President.

REPORT OF THE DEAN.

To the President of Rutgers College:

The college year has been one of many interruptions. Following a late opening, due to the summer epidemic, the notable Celebration in October of the One Hundred and Fiftieth Anniversary of the founding of Queen's College delayed still further the beginning of regular work. An unusual prevalence of sickness necessitated two periods of partial quarantine, and lastly the national emergency connected with the great war made it necessary for many students to withdraw before the end of the year, some to go into military and naval service, and a still larger number to take some part in agricultural production in answer to urgent calls. The regular courses have, however, been fully maintained, and the students have shown commendable steadiness in finishing their work with a smaller percentage of failures than in some previous years. The general good order has never been more satisfactory, based as it is on the effective cooperation of the Senior Council and the student body.

Notwithstanding numerous statistical studies which have shown its falsity, the statement is often made that there is no demonstrable relation between success in undergraduate work and later success in business and professional life. Indeed it is often stated that first honor men in particular are not likely afterward to attain distinction. If this were true it would go far to discredit the value of a college education, and would certainly demand a fundamental revision of college standards.

The question at issue is not whether the college curriculum develops power in the individual and trains his mind so that he is able to deal successfully with the problems which arise in his later career, but whether scholastic standing in college is or is not a fairly accurate test and measure of capacity and character, and so an indication and a prophecy.

College faculties go on the assumption that the intellectual acumen and the power of concentration demanded of the man who

takes high rank in his studies are valuable assets in the competition of business and professional careers, that persistence and perseverance, attention to details, the power of self-denial, the subordination of less important matters to matters of greater moment, and similar qualities, all characterize the honor man, and are all qualities of permanent value.

If this assumption is correct, then it should follow as a matter of course that students attaining high rank in their undergraduate careers will come to high places in professional and business life in larger numbers than students of lower grade, and we should anticipate that the percentage of success would be greatest for the so-called first honor men.

The issue is complicated by the fact that many individual students neglect the courses of study prescribed or chosen in the curriculum, but are engaged very strenuously in other lines of work, sometimes of a most important kind, for which they neither obtain nor seek credit toward a degree, but which as tests of the qualities enumerated above are perhaps even more valuable. Such men graduate in the lower section of their classes, and yet have done as purposeful work, and work of as high order of training value, as the man who has made the mastery of his scheduled work his first concern. Every college counts among its graduates men of high distinction who were independent of the curriculum, and perhaps defiant toward its demands, but were doing work quite as well directed on their own initiative, and gained doubtless quite as much from this self directed energy.

Again, there is a considerable number of men of low scholarship standing, whose poor showing in college is due rather to their engrossment in other interests of student life, than to lack of intellectual vigor, and these interests have fostered initiative and leadership, and have proved, particularly in business, an admirable introduction to a highly successful career.

Are men of these types so exceptional that they do not affect the general average experience, or are they so numerous that nothing can be predicted by grades of scholarship, when a class graduates, as to the later careers of the members?

Another difficulty complicates any inquiry of this sort. No one can give a precise definition of success, and no list of success-

ful alumni is much more than an opinion. Sometimes lists have been taken from such books as "Who's Who." This method has the advantage of being measurably free from the bias of individual judgment, but all such lists are arbitrary, and of little value, except perhaps for comparison.

For the purpose of this study, I have adopted a somewhat different method. The field chosen covers the forty-four classes graduating from Rutgers College from 1862 to 1905, inclusive. I start with 1862 because with this class the careful scholarship records in our registrar's office begin, and I end with the class of 1905, because later classes have not yet been long enough in the actual competition of business and profession to make an estimate of relative success possible. These forty-four classes, averaging about thirty to a class, graduated 1,326 men, who form a comparatively small body, well known to some of those who have been the closest students of alumni interests. Their careers are familiar and their most important achievements recorded.

I therefore asked four men who have the most intimate knowledge of the body of alumni, and no detailed knowledge of their undergraduate scholarship standards, to prepare independently two lists each, first a list of men who had in their judgment achieved real eminence, and secondly of those, a larger group, who have been highly successful. In order to get some degree of uniformity of standard, I limited the first list to about thirty, and asked for the judgment of each as to the thirty most eminent men from '62 to '05. For the highly successful group, I set the limit between 250 and 300, roughly one-fifth of the entire number. These lists were made up after mature consideration quite uninfluenced by any knowledge of the scholarship standing of individuals. They were drawn up independently and each one of them is based on the careful judgment of a trained thinker and close student of the alumni body. If the results of an analysis of each of these agree in all important respects, and differ only in unessential details, we may safely conclude that the analysis of an ideally correct list of "eminent" or of "successful" alumni, if such were possible, would yield a similar result, and we may properly dismiss any attempt to set up a definition of such elusive terms as "eminence" and "success."

In dealing with this material I have pursued the same plan as regards both lists, *i. e.*, the small list of eminent men and the larger list of highly successful men. We consider first what proportion of the men in any group are found in each list, *e. g.*, what proportion of the first honor men are found in the list of men selected as eminent, and what proportion in the list of men designated as highly successful. The percentage is determined, of course, by dividing the total number of men who form the group into the number from this group who find a place in the list. Thus since forty-four men were graduated with highest honors, if ten are found in the list of eminent men, the percentage of expectation will be $10 \div 44$ or 22.7%, that is, somewhat more than one-fifth of the first honor men have been rated as eminent in later life. Or again, since 442 were graduated in the first third of their respective classes, if 21 are found in the list of eminent men, the percentage of expectation for them will be $21 \div 442$ or 4.8%, that is, not quite five per cent. of the men who graduated in the first third of their respective classes have been rated as eminent in later life. If we take the highly successful list the process is the same. If from the 44 first honor men, 22 have been listed as highly successful, including of course the ten listed as eminent, then the percentage of expectation is $22 \div 44$ or 50.0%, that is, one-half of the first honor men have been listed as highly successful in later life. We may compare first the percentage of expectation of the first, second and third honor men, and then of the highest sections of the classes from the narrowest to the widest, *viz.*, the men of the first sixth, the first fifth, the first fourth, the first third, and farther if we desire. Or we may compare the different sections of the class with one another. How do the men graduating in the first third compare as to percentage of expectation with those graduating in the second third, and in the third third?

Once more we may turn the question the other way and inquire how large a percentage of the men listed as eminent, or as highly successful graduated in the first third of their respective classes, and how large a percentage in the second or the third third. Thus of 32 listed as eminent if 21 graduated in the first third of their classes, and 11 in the second third, the percentages of distribution

are found by dividing by 32, thus $21 \div 32 = 65.6$, and $11 \div 32 = 34.4$. It would then appear that of the 32 eminent men about two-thirds graduated in the first third of their respective classes, and one-third in the second third, and none in the third third.

The details of this study may be found in an article shortly to be printed in the Educational Review, and in somewhat fuller form also in the current number of the Alumni Quarterly. For this report the conclusions reached from an examination of the statistics will perhaps suffice.

First: All the separate lists, though made up independently, exhibit the same general characteristics, and the difference of personnel makes no essential difference in the ratios obtained. The percentages are so steady and so nearly uniform that it may fairly be assumed that a list of eminent men or a list of successful men, based on any reasonable definition of the terms, would yield the same results.

Second: The men who graduated with the highest honors make by far the best showing. Somewhat more than one out of five are found in the list of eminence, whereas from the rest of the class less than one out of fifty make this group, *i. e.*, the first honor man is ten times more likely to attain eminence than his classmates.

Third: In the larger group of those classified as highly successful the advantage of the first honor man is marked, but not so overwhelming. Somewhat more than half the first honor men appear in this list, while only one out of five of their classmates find a place in it, *i. e.*, the first honor man is about two and a half times more likely to achieve success than his classmates.

Fourth: When the classes are studied by divisions or thirds, the percentages show a regular decrease from the first third to the third third. About two-thirds of the eminent group ranked at graduation in the first third, about one-third in the second third, and only a negligible percentage in the lowest third.

Fifth: In the highly successful group the same advantage of high stand men is to be observed, but the contrasts are not so pronounced, the first third of the class contributing a little less than one-half, the second third a little less than a third, and the lowest third about one-fifth of the group.

Sixth: It is quite clear that undergraduate scholarship has a very important relation to future success, not necessarily in regard to an individual, but unmistakably when the whole membership of class is considered. A man who graduates in the lowest third of his class has little likelihood of attaining the highest success which we have called eminence, and less than one-half the expectation of reaching what we have called success, compared with one who graduated in the first third.

Seventh: Not only is it not true that the first honor man generally remains inconspicuous after graduation, but on the contrary it is the first honor man who ranks above all the other members of his class in the reasonable expectation of future conspicuous success, and this pre-eminence is most marked in the higher ranges of success which we have called eminence.

ATHLETIC GROUNDS.

The question of providing sufficient grounds for athletic use has, with the growth of our student body, become a very urgent one. It is not so much that we lack space for the practice of college teams which compete in intercollegiate contests, although this is in a measure an urgent need, but that the proper development of intramural sports is greatly handicapped for lack of room.

As athletics find their proper place in undergraduate life, the relative importance of these intramural sports, where the competition which exists is between classes or other groups, and where opportunity of physical development is to be afforded so far as possible to the whole student body, should be greatly increased. The general trend of modern discussion emphasizes physical development for the many, rather than intensive training for the few, the exceptionally developed individuals who can "make a team." In fact the majority, the men of average athletic ability, and those of subnormal physical development, stand in the most urgent need of the physical exercise which takes most effective form in competitive sports. It is in the interest of this larger phase of the question that the problem of athletic grounds has become really urgent.

In order to form a basis of comparison, I have secured information from thirteen eastern colleges with an average student enrollment of about five hundred. The institutions giving information are Union, Hamilton, Amherst, Lafayette, Brown, Wesleyan, Colgate, Williams, Rochester, Franklin and Marshall, Bowdoin, Swarthmore, and the University of Maine. In tabulating the replies I have indicated the institutions by figures only, and have arranged them in the order of the acreage now developed and used for athletic purposes. The facilities for track work are not tabulated since all alike have one quarter-mile cinder track with appropriate space for field events, and only two report in addition a board track for winter use.

The matter of accessibility is of course of primary importance. This is indicated in the table by (a) when the distance from the campus or the gymnasium is less than half a mile. Greater distance is noted approximately in miles.

With this notation in mind the table is self-explanatory. The first column shows the total acreage in present use, and the second the acreage held for future development for athletic purposes. Where the area reported exceeds 50 acres it is tabulated as \times . The other columns show roughly what provision is made for football, baseball, and tennis. The number of tennis courts given does not include fraternity or club tennis courts but only those provided by the institutions for student use. The bracketed numbers show additional courts in process of construction.

	TOTAL ACREAGE		Football Fields.	Baseball Fields.	Tennis Courts.
	In present use.	For future use.			
1	28	29	4 (a)	3 (a)	11
2	15	35	2 (a)	1 (a)	4 (6)
3	14	\times	2 (a, 1 m)	2 (a, 1 m)	8
4	13	\times	1 (a)	1 (a)	12
5	12	10	2 (a, 1 m)	2 (a, 1 m)	6
6	12	..	2 (a)	1 (a)	14
7	10	\times	2 (a)	2 (a)	0
8	10	20	1 (a, 2 m)	1 (a, 2 m)	6
9	7	..	2 (a)	2 (a)	11
10	6	15	1 (a)	1 (a)	5
11	6	9	3 (a)	3 (a)	4 (2)
12	5	9	1 (a)	1 (a)	7
13	3	..	1 (a)	1 (a)	8

It will be observed that No. 1 is well equipped with ample ground for present use and for future growth. The football fields accommodate both Rugby and Soccer and all are within easy reach. No. 8 though possessing adequate acreage, labors under a great disadvantage in the distant location of the fields. No. 13 appears to be in the worst plight of all, though the acreage reported probably does not include the tennis courts. The seriousness of our own problem is at once evident when the grounds at our disposal are compared with those shown above. It has seemed to me that a clear statement of these facts might be of interest and of service even without practical suggestions of remedy.

THE STUDY OF LATIN AND COLLEGE STANDING.

In answering a questionnaire designed to ascertain how undergraduates who have studied Latin either in preparatory school or in college compare as to rank in scholarship with those who have never studied Latin at all, I have examined the facts for the five classes graduating in 1912, 1913, 1914, 1915 and 1916, and have tabulated the results. The inquiry necessitates, on the one hand, the study of certain groups comprising those students who have taken honors of one sort or another, and on the other hand the analysis of the whole student body, and of each of these groups with reference to the study of Latin subdividing them severally into three sub-groups, viz., those who pursued the study of Latin in the preparatory school and continued it in college (Latin continued), those who pursued the study of Latin in the preparatory school but did not continue it in college (Latin discontinued), and those who have never studied Latin at all (no Latin). It necessitates, furthermore, the computation of average grades for each group, and each sub-group. The facts are shown in the following table:

	Total Number of Students.	Students entering with Latin and continuing it.	Students entering with Latin and discontinuing it.	Students without Latin at all.
Total number of students graduated in 1912-1916:				
Number	350	82	66	202
Grade	77.2	79.8	78.2	75.8
Students receiving highest general standing for full college course (A or 1st group) :				
Number	36	21	5	10
Grade	87.0	87.3	86.9	86.4
Students receiving high general standing for full college course (B, or 2d group) :				
Number	86	20	20	46
Grade	82.9	83.4	82.8	82.6
Students who have won prizes open to the competition of all, not including prizes in the Classics:				
A. In Language, Literature and Fine Arts—				
Number	40	27	4	9
Grade	83.2	83.5	82.6	82.5
B. In Mathematics, Physical and Natural Science—				
Number	6	3	2	1
Grade	86.8	86.8	89.6	81.4
C. In Philosophy, History, Political Science, Economics, Etc.—				
Number	20	15	4	1
Grade	85.6	86.3	85.2	76.5
Students participating in intercollegiate debates:				
Number	16	13	2	1
Grade	82.3	83.2	81.4	77.0
Students serving on editorial boards of student newspapers or magazines:				
Number	61	23	8	30
Grade	78.7	81.8	79.7	76.1

It is a striking fact that the group that enters with Latin and continues its study in college is very notably superior by all the tests proposed, and that the group without Latin at all stands lowest in the proportion of honors secured and in average grade for the course. The group that comes with Latin, but does not continue it in college, forms a mean between these extremes. This becomes very clear when we calculate the percentage of each group which attains each one of the honors taken as tests. Thus 25.6% of the "Latin continued" group graduate with High Honors, as against 7.6% of the "Latin discontinued" group, and 5% of the "No Latin" group. This table is deduced from Table I.

	Honor Men			Prize Winners			Debaters	Editors
	A	B	BK	A	B	C		
	%	%	%	%	%	%	%	%
Latin Continued ..	25.6	24.4	28.0	33.0	3.7	18.3	15.9	28.0
Latin Discontinued,	7.6	30.3	16.7	6.0	3.0	6.1	3.0	12.1
No Latin	5.0	22.8	7.9	4.5	0.5	0.5	0.5	14.9
Whole College	10.3	24.6	14.3	11.4	1.7	5.7	4.6	17.4

The evidence is conclusive that among the students who take honors in college those who have pursued the study of Latin largely predominate, but this does not warrant the deduction that their success is due to the study of Latin, for in spite of recent changes in the secondary school curriculum, it still remains true that the courses in Latin are chosen by a selected group and this group includes a disproportionate number of the boys and young men of intellectual vigor and of scholarly ambitions.

REPORT OF THE LIBRARIAN.

To the President of Rutgers College:

I respectfully submit the annual report of the Library for the year ending June 30th, 1917.

The increase in the number of bound volumes was 5,117, making a total of 90,000. There were received several thousand unbound items. Of the bound books, 2,211 were purchased and 2,906 were received through gift.

The purchases under the various funds and the total number of gifts were as follows:

Robert H. Pruyn Library Fund.....	183
P. Vanderbilt Spader Library Gift.....	71
Benjamin Stephens Gift.....	48
Henry Janeway Weston Memorial Fund.....	1
Silas Cook Fund.....	6
State Appropriation for Books and Periodicals.....	804
Hatch Fund	8
State Appropriation for Summer Session.....	127
Philosophy Class Library.....	29
State Appropriation for Experiment Station.....	449
State Appropriation for Ceramics Department.....	295
History Department Gift.....	4
State Appropriation for Sanitary Science.....	86
Morrill Fund	100
Gifts	2,906
	<hr/>
	5,117

The gifts of the year exceeded in number by 1,368 volumes those of the preceding year. Several of the more important ones were as follows:

From Mrs. Charles E. Hart—1,000 books and several hundred pamphlets from the library of the late Professor Charles E. Hart, D.D. This gift has added much of value to the de-

partments of English literature and criticism, philology, Anglo-Saxon, philosophy, aesthetics, art and theology.

From Professor Albert S. Cook, L.H.D., LL.D., of the class of 1872—\$500 in memory of his mother, Sarah Cook, the income of this fund to be used for the purchase of books.

From Miss M. Josephine Atkinson—The New Yorker, volumes 1-7.

From John B. Ayer, M.D., of the class of 1876—The History of the Art of Writing. By Henry S. Williams. Four folio volumes of reproductions of manuscripts.

From Carnegie Endowment for International Peace—Valuable books and pamphlets on international law.

From Carnegie Institution of Washington—Publications.

From Talbot R. Chambers, M.D.—The Commission, dated May 30th, 1755, of Rev. Theodore Frelinghuysen to proceed to Holland in order to raise funds for a university for the Dutch Church.

From Mrs. Margaretta Campbell Deland, L.H.D.—A finely bound set of her writings.

From Louis P. de Boer, Esq.—Copies of important Dutch manuscripts, throwing much light on the early history of the Reformed (Dutch) Church.

From Charles L. Edgar, Esq., of the class of 1882—Proceedings of the National Electric Light Association and Transactions of the Illuminating Engineering Society.

From Mrs. Edward W. Hall—Silver spoon formerly owned by Henry Rutgers and an autograph of General Garibaldi.

From the Knights of Columbus, New Brunswick Council—The Catholic Encyclopedia.

From Hon. Louis H. Schenck, of the class of 1874—Many valuable books.

From Franklin S. Smith, Esq., of the class of 1884—A Rutgers scrap book.

The Library has received constantly gifts of books and periodicals from:

President W. H. S. Demarest, LL.D., '83, Professor John C. Smock, LL.D., '62, James Neilson, Esq., '66, Edward C. Pearson,

Esq., '68, Leonor F. Loree, Esq., '77, Robert A. Cook, Esq., '79, Rev. Charles Maar, '89, William S. Myers, Sc.D., '89, George F. Scull, Esq., '95, the Misses Emma W. and Anne Cook, John P. Wall, Esq., Rev. John A. Dewald, D.D.

During the year there were two changes in the Library staff. Miss Mary Gillespie, the Assistant Librarian, who had been a member of the staff for six years, resigned her position on December 1st, 1916, and in the same month married Mr. George W. Martin, of the class of 1912. Mrs. Martin had done much important work for the Library and her resignation was received with regret. Miss Gertrude Olga Broffé became a regular member of the Library force and did excellent work in the Library and in connection with the arrangements for the Sesquicentennial of the college.

The purchases of the year provided for the immediate needs of the various departments of the college. A number of important sets were secured, and much material was obtained for the new departments of physiology and sanitary science.

In connection with the above, I would make a special appeal for a gift of \$1,000 or \$2,000 for books for the Department of Spanish. There is in the college great interest in the study of Spanish, forty-one students having elected the subject during the past year. There are in the Library very few books in or concerning Spanish, and the department is greatly handicapped in its work because of this lack.

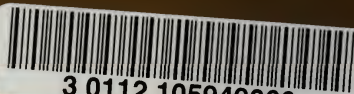
The ordinary work of the Library went on much as usual, and in addition there was much done by the Library staff in connection with the Sesquicentennial of the college, the preliminary work of raising the new Endowment Fund, and the compilation of Class Histories. During the Celebration in October, the Library had on exhibition a collection of most interesting material relating to the history of the college and locality. In addition to the collection owned by the Library, a number of rare and interesting items were loaned by alumni and friends of the college.

Professor Walter T. Marvin, Ph.D., Chairman of the Library Committee of the Faculty, with the cooperation of the Librarian,

prepared a comprehensive appeal for larger funds for purchase of books and administration expenses, which was issued in printed form, a copy of which is appended to this report.

In closing, may I state that this year marks the twentieth anniversary of my connection with the Library, and the tenth since appointment as Librarian to succeed the late Irving S. Upson, of the class of 1881. I wish to express my appreciation for the constant, kindly cooperation and courtesy shown me during these years.

GEORGE A. OSBORN,
Librarian.



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